

## ABSTRACT

A direction sensor has a first and a second bridge circuits; each circuit including at least two detecting elements formed on a main surface of a substrate and connected in series and their longitudinal directions are crossing each other. The sensor has also a first and a second magnetic bias application parts respectively facing toward the first and the second bridge circuits. Directions of magnetic field of the magnetic bias application parts are different with each other. The direction sensor does not require a holder or a coil; therewith miniaturization of the sensor is feasible.